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Conference Abstract

The Platform for Cybertaxonomy: Standards, services and tools

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Abstract

The Platform for Cybertaxonomy (http://www.cybertaxonomy.org) is a standards-based open-source software framework covering the breadth of the taxonomic workflow, from fieldwork to publication (Ciardelli et al. 2009). It provides coupled tools for full, customized access to taxonomic data, editing and management, and collaborative team work. At the core of the platform is the Common Data Model (CDM, Müller et al. 2017), offering a comprehensive information model covering all relevant data domains: names and classifications, descriptive data (morphological and molecular), media, geographic information, literature, specimens, types, persons, and external resources.

Platform compliant software interacts via services and includes the following components:

- CDM Server
- Taxonomic Editor Rich Client
- Web-based editors
- Drupal-based and highly configurable portal software
- Map services and map viewer
- Xper2 descriptive data editor
- Specimen search tool

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- Import and export modules

Recent platform-based developments include software components for deriving formal species-level descriptions from measurements on individual specimens (Henning et al. 2018) as well as a registration system for nomenclatural acts of algae (Phycobank, https://www.phycobank.org/). Currently, about 30 portals with regional and taxonomic foci are using the Platform for Cybertaxonomy as their technical basis for capturing, managing, and publishing biodiversity data over the World Wide Web. Prominent examples are the Euro +Med Plantbase, the International Caryophyllales Network, and the Flora of Greece.

Keywords

cybertaxonomy, workflow, tools

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